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*preliminary theoretical explanation*

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# **Environment, belonging and social world in the Aalborg Model**

## **Preliminary theoretical explanation**

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*Keywords: Study environment, learning environment, learning, PBL, The Aalborg Model*

“At Aalborg University the students has their own office”  
– In a report to professor colleagues from a Dutch visitor to Aalborg University 2007.

### **Abstract**

The physical environment at the Basic Year of the Faculty of Engineering, Science and Medicine at Aalborg University can for the majority of students be described as rooms side by side on naked floors with very few relaxing areas or without any atmosphere or flavour of academia. The learning environment seems also to be relatively poor – loaded with courses without much individual contact to the professors and long working days interrupted by one hour visits of the facilitator once a week. In spite of this the drop out rates are fairly stable and at a very low level. When explaining why they drop out students do not mention lack of physical or academic environment as a reason. Only very few drop out because of the social environment between students. Assessment of the project group environment is generally positive. The article refers results from surveys related to the environment during the last years and gives a theoretical and tentative explanation.

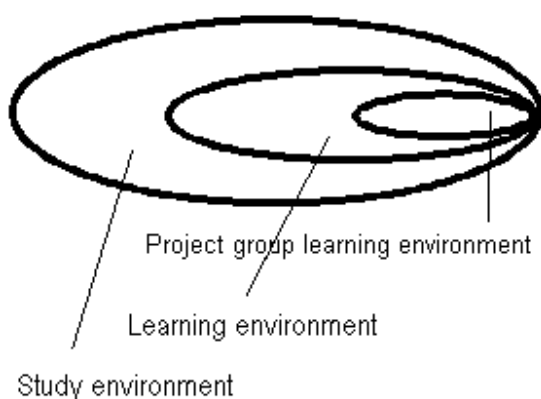
## 1. DEFINITIONS

If study environment is defined as the sum of all the factors - between others physical, social, psychological - influencing the student then the learning environment could be described as the factors influencing the learning of the student. Those could be physical, social, psychological, interpersonal etc. Some of those environmental factors are under the influence of the university. Others are not. The university is responsible for buildings and lecture rooms, lectures, service personnel etc. Other factors are related to each single student. For instance the social relationship with co-students - e.g. in a group.

The learning environment is a subset of the study environment. The study environment includes also facilities for students provided by others than the university administration, e.g. by the municipality, by student associations, by the market – e.g. the market of dwellings or entertainment etc.

A subset of the learning environment in project organized PBL models could be called the project group environment. It could be defined as the learning environment under the influence of, dominated or created by the group itself. It could be physical, social, psychological, communicative or interpersonal related.

Figure 1 illustrates the relation:



*Figure 1: The relationship between study, learning and project group learning environment*

All definitions are broad and it seems as if this is not very useful. There seems to be a lack of specific and clear definitions. When students in a questionnaire are asked questions of their study environment it could mean a lot of different things. Do they when they answer the questionnaire think of environmental facilities provided by the municipality, by organisations, by the market, by the university, by individual teachers or by themselves in relation with co-students?

## 2. SURVEYS AT THE ESM BASIC YEAR, FINDINGS

The ESM Basic year has collected data about the “study environment” without being very specific about what should be understood by the study environment. The data is collected in relation to the drop out investigations which is carried out each year. When resigning or dropping out the basic year the students fill-in a questionnaire. They are asked for their reasons to leave the basic year. Among others they are asked if it was because of the study form, the educational content, the choice of a wrong education, the student environment (the social part), personal circumstances (as economy, housing, family relations etc.)(Qvist et al. 2006a; 2006b)

The results for study year 2004-5, 2005-6 and the preliminary results for 2006-7 is seen below: Very few students leave because they are dissatisfied with the student environment. Nobody mention that they leave because of the physical or learning environment

Year	Drop out rate %	Drop out numbers	Reason: Student environment, numbers
2006-7*)		61	3
2005-6	13	107	6
2004-5	16	116	12
2003-4	11	85	**) )
2002-3	13	90	**) )
2001-2	12	94	**) )

\*) Figures are preliminary – date May 22th 2007

\*\*) No data available

*Tabel 1: Drop out rate at the EMS, Basic Year 2001-07*

(The ESM Basic Year; Qvist et al 2006a, p. 3 ; Qvist et al 2006b, p. 4)

In 2005-6 it was less than 6 % of the students which left the basic year who gave student environmental reasons to the drop out. The year before it was 10 % of the students. Also for 2006-7 is the number of students which relate their drop out to the student environment very low.

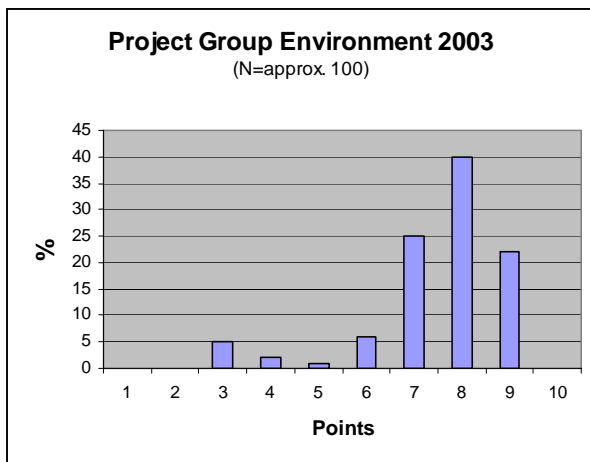
The questionnaire is not very exact about what should be understood by the concept “the student environment (the social part)”. It is open for the student to think of the relation with co-students, the common social life or other aspects.

In the study year 2002-03 (Qvist, 2003) a group of nearly 100 students from the basic year in the department in Aalborg – consisting of approx. 20 % of all students on the year - were asked to assess a part of their learning environment – the part which has to do with the study – or – working in the group. What could be called the project group environment – i.e. a part of the learning environment. The assessment was carried out in connection with a CLP lesson. The lesson related research in psychological environment on the academic labour marked to environment for students at the university mainly in the groups.

The CLP course is a 2,2 ECTS course in co-operation, learning and project management carried out by the CLP Group which consists of experts in project management from the Faculty of Engineering, Science and Medicine.

The participants in the investigation were not selected representatively. They were students from the cohort groups of: Planning and Environment, Global Business Development, Land management, Geography, Building and Construction and Industry.

The result are seen below:



*Diagram 1: Project group environment, cohort groups: Industry, Building and Construction, Planning and Environment, Global Business Development, Land management, Geography (Qvist, 2003)*

22 % of the students answered that the environment in their project group was almost as good as they wanted. They gave it 9 points. 4 out of 10 – 40 % - responded that the project group environment was valued to 8 point. 25 % gave their environment 7 point. Approx. 8 students – or 14 % are unsatisfied with the environment in the group. They assessed the environment low: 3, 4, 5 or 6 points.

Students responding that the environment in the group is not as good as desired, gives as reason that the group is not homogenic, which demands a lot of work if they want the cooperation to function optimally. It draws energy from the group. People are different explains one group member and it is not possible to change that fact. Long discussions where nobody is listening of what is said by the others is also drawing energy from the group and creates a bad environment in the project group.

Lack of social contact outside the group room after university hours has finished are also mentioned as a reason for a low score. There is no common social community although the young men in the group fits together, play games or watch football while the lonely female do not take any initiatives, are outside, can look at what the boys are doing or follow them if she wants, explains one respondent.

Lack of overview, planning and communication between the group members leads also to a low score when assessing the environment in the group. Lack of knowledge sharing but also a bad atmosphere or mood results in a poor assessment of the group environment. When one or more members in a group discussion are rude towards others it is easily seen as strongly negative or provocative and results in a poor group environment. Some group members might have difficulties accepting criticism and might feel that somebody are strongly against them. When a group member are felt not accepted then it is seen as negative.

Lack of initiative and commitment also results in a negative atmosphere in the group. If some perceive the university as a school or are uninterested it creates a negative group environment.

Different opinions of the courses and their relevance have also given environmental problems. If some think that specific courses are irrelevant and stay away while others attend the courses it results in different level of knowledge and a negative attitude towards the group mates not attending the course.

The same questionnaire was used in the following years with similar results.

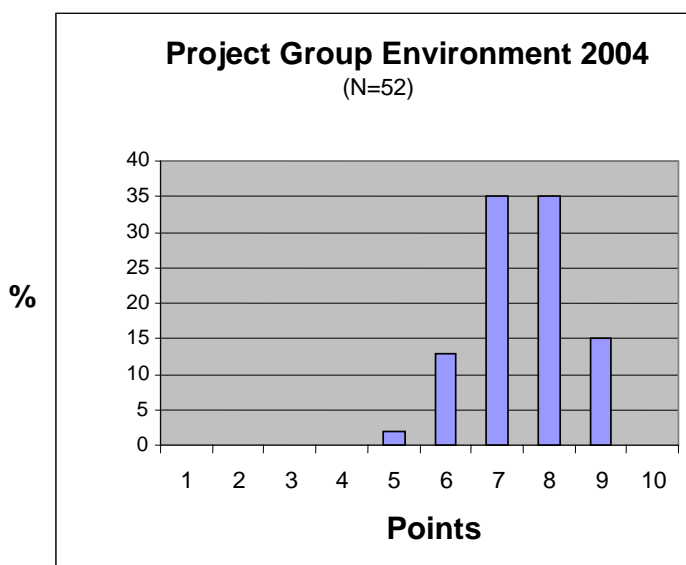


Diagram 2: Project group environment, cohort groups: Building and Construction

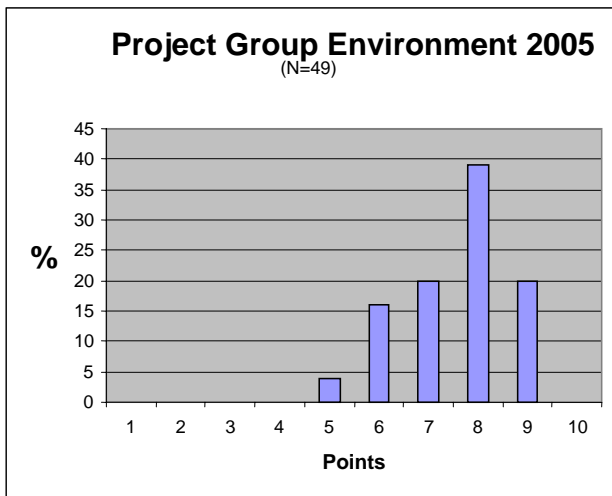


Diagram 3: Project group environment, cohort groups: Industry, Building and Construction

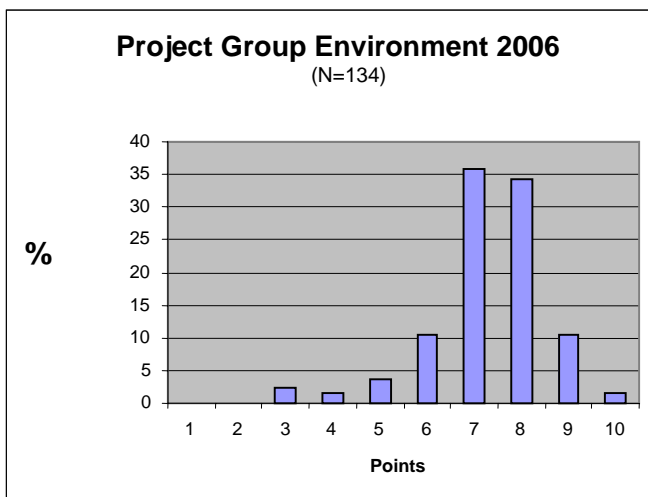
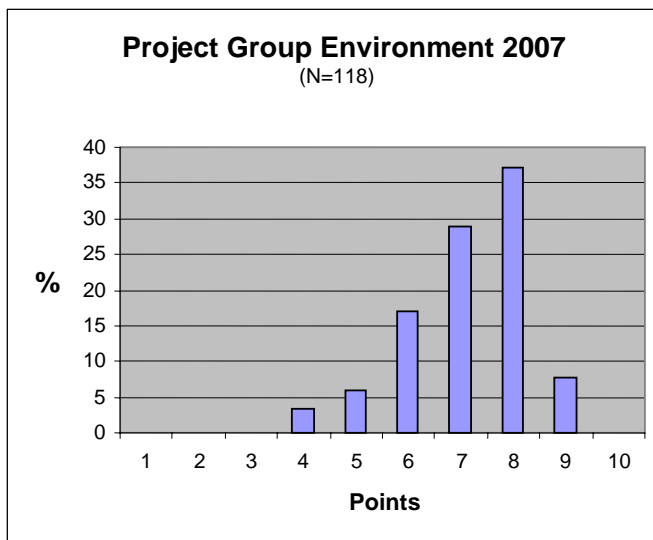


Diagram 4: Project group environment, cohort groups: Industry, Building and Construction, Natural Science and Chemistry, Environmental Technique and Biotechnology



*Diagram 5: Project group environment, cohort groups: Industry, Building and Construction, Medialogy, Informatics, Natural Science and Chemistry, Environmental Technique and Biotechnology*

Asked in 2007 the respondents with the lowest score – 4, 5 or 6 – formulate a number of reasons as to why their groups have a poor environment. Insufficient communication about goals, about coordinating and structuring of the tasks, or about problems and solutions (technical as well as collaborative) are seen as obstacles to the desired project progression. Likewise are endless discussions without prioritising relevance and/or without making conclusions placing the project in deadlock. In conjunction with insufficient task follow-up or work review all of these situations can result in low work-morale, little work progress and too much non-project activity.

Negative communication can be a source of de-motivation. The same applies to differences among group-members regarding participation and contribution – whether way too much or too little. Physical absence or mental absence makes little difference in students' perceptions. A similar view regards the cases of inefficient project-work as internet, phone-calls or social activities take over or simply divert focus or decrease concentration.

Students point out how a weak project-focus or vaguely defined tasks will result in lack of seriousness. When it comes to absent motivation or even lack of clarity regarding project status then students find a direct connection with absence, irregular show-up and insufficient learning. The lack of project-structure can lead to misunderstandings and even more lengthy discussions without results. Such situations may affect students towards lacking desire for making decisions, as these may later turn out to be faulty, as well as lacking initiative regarding taking a lead or reviewing other's work.

The diversity among group-members regarding values, ambitions, goals and plans are mentioned as sources of poor environment. Absence of community feeling counts for a number of reasons



mentioned leading to poor environment.

### 3. THEORETICAL EXPLANATION, TENTATIVE

Without proposing having a full overview it seems that study and learning environment mainly has been studied in relation to drop out and socializing of new types of students. There seems to be one dominating paradigm (Andres 2004).

The paradigm dominating could be called the institutional-fit paradigm. The paradigm is based on the theoretical model of persistence and drop out developed by Tinto (1975, 1987). Persistence and withdrawal are within this model understood as the degree of “fit” between students and the institutional environment.

According to the paradigm the integration of the student – the extent to which it happens – are related to the academic performance and level of intellectual development of the student. Social integration and the feeling of wellness is a result of the quality of peer interactions and the quality of students’ interactions with faculty.

Students come from different social, community and geographical origins. They have different pre university experiences, skills, values and goals for their future. Such characteristics affect the student and the intentions and commitments in relation to educational activities. It also affects the experiences to the institution and services delivered by the institution in relation to learning and being a student. These experiences influence the students’ integration into the institution.

The lower level of institutional and goal commitment the more likely is it that the students dislike the environment and leaves the institution. The higher the students level of institutional and goal commitment the more likely is it that the students like the environment and stay at the institution.

This paradigm has been met by critique. The socialisation of the student into the faculty cannot be understood in isolation from the multiple context within which students operate. These contexts is not only their background but also and more important e.g. outside support, family, private life, society, preparedness, situation, psychosocial, emotional and socioeconomic consideration. Institution and program are only part of it (Andres 2004)

It can also be questioned whether students are integrated. Some are more or less eliminated (Bourdieu & Passeron, 1970) The behaviour of the remaining could be seen as living besides the university and its norms and values.

Students can be seen as agents in dynamic interaction with and within societal institutions (Archer 1982; Coleman 1986; Giddens 1984). Students enter - as agents - higher education with

a variety of resources, competences and strategies. They are not without engines of actions, completely controlled and shaped by their environment – the teachers, the program, the faculty. The structure of the institutions has an impact on the lives of students, their student life, study and learning environment. But the students do also meet people, practices and policies within societal institutions others than the university. They have a family, a fiancé, a job that also controls or facilitates their ability to integrate socially and academically in a group and to reach their personal and collective goals of the group. At the campus they accept the rules and values but they do also live other lives.

Educational institutions and the people within the institution can be seen as a field within the multispace of the social world of a student (Bourdieu 1991). Students have relative positions in all those spaces. At the university relative to the group, the programme, the faculty, the resources, policies and practices of the institution. The institution and the people within it create a field of forces and a field of struggles which influences or perhaps tends to transform or conserve the field of forces.

Within the framework of Bourdieu a study, a unit as the ESM Basic year or a project group can each of them be understood as a field. The latter being a subfield of the former. (Bourdieu and Wacquant, 1992). In each field individuals interact with each other and the structures of the field. This relationship operates in two ways. The field structures the habitus and habitus contributes to the constitution of the field to a meaningful world. The acts of the individual form a world with sense and with value in which it is worth investing a practice (Bourdieu 1989c) The acting in the fields depends on the social capital or products represented. Social products are material but it is also thought, actions, objects, any products of human activity (Bourdieu, 1980b). The adding of social capital within the field depends on the capital existing and the structures of the field.

Educational institution - also Aalborg University - offers students different physical, material learning fields with separate rules (doxa). There are e.g. auditoriums, seminar rooms or class rooms. Especially the offer of a group room at Aalborg University as part of the Aalborg Model (Kjaersdam & Enemark 1994) is unique compared to traditional universities. At the beginning of the semester this physical, material field is totally naked and the students in a group have a relative freedom to create and arrange this field. Physically but also mentally. Here they can set up their own rules and create a social mini world of their own.

Students relative position and their perception of the study and learning environment at the institution are not only defined by the faculty or the study board but also by other relevant “fields” as family and work which influence their priorities and habitus. Individuals incl. students have capacity and possibility to change their own situation or compensate for a given situation. The individual with a given cognitive precondition (habitus) transforms his or her capital (social, cultural, economic etc.) in the different spaces in search of reaching individual goals. A faculty, a programme or a project group is only one by other fields or spaces. It might be valued the most important one worth to fight in. Or it might be valued less important or not worth one penny to fight for or improve. (Andres, 2004)

The social activity in a field can be described as a game. There are rules which govern how the game is played. The rules determine what is allowed and what is not allowed. Playing the game has between other to do with knowing the rules. There are good players and there are poor player. Some are winners and some are losers. But by entering the game each individual implicitly or explicitly accepts the rules and the other players of the game. Players may be in or out of the game.

The social activity in the fields can also be described as a marketplace. At the market producers are competing for their products. Social activity is governed by the individuals each 'competing' for own ideas, values and 'products' with the strength determined by personal resources. All 'products' and actions within a field have a value. It is capital. Some individuals may or may not have the necessary pre-existing capital to play it to their advantage. A group room at Aalborg University is a typical materialisation of the marketplace.

Individuals in educational fields come with their own generated structures developed in former as well as other fields and form affinities and disaffiliate with the relations in their new educational fields and the structures within and surrounding them.

Fields and its individuals consist of and produces capital. In an educational context mainly cultural and social capital. Some are able to produce more capital than others. Some understand how to produce capital better than others. Some producers and products are valued higher than others within the field (Grenfell 1998).

In the Aalborg Model the group room is the physical materialisation of a field. Here the students spend a lot (the most?) of their time. Not least because 50% of the educational time is occupied with group and project work. (Kjaersdam & Enemark, 1994; Kolmos, Fink & Krogh, 2004). Perhaps it is the most important physical field in the model. Each member with its habitus consists of and produces capital within a structure defined by the study regulation, the norms of academia and the lecturers. This structure transforms social and cultural capital into a project and new habitus, new social and cultural capital.

Group members do not act as robots in the field but form it with the help of their different habitus and with input from the university (at ESM Basic Year mainly through the CLP Course).

Each member confronts their habitus with each other and creates rules and norms valid for the members in the field. Because of the relative autonomy for the group to create and form its own field it has the possibility to establish a social world of its own. A world relatively free from interference of which each group members feel belonging to and worth supporting. And different and perhaps with more autonomy than other fields. Games and fighting within the field is not unusual but can be controlled by rules set up by the members themselves. So the group room with its members is a physical materialisation of the field "The group" filled with space and relative freedom only restricted by the academic structures – mainly demands, goals or objectives - in the study regulation and from the facilitator in the form of supervision and academic advices.

Each group member represents an acting habitus in the material and mental field of the group

and contributes to the common social and cultural capital represented in the field. Because the capital to a certain degree is created by the group itself it influences commitment and has an impact on academic success and failures.

Sense of membership and belonging are feelings created or developed in the group field. They are material connected to the physical group room. Such feelings are important when understanding students' integration into the university (and low drop out rates) as well as their assessment of the environment (Alderman, 2004).

Cognitive engagement - creation of social and cultural capital - in the field of a group can be understood and grounded on the psychological nature of membership or belonging (Wehlage et al. (1989). Membership can be defined (Goodenow 1993) as the extent to which students feel themselves personally respected, accepted, included and supported by others. Such sense is according to Connelle & Wellborn (1991) among others based on belonging and relatedness. When students in a certain sense feel that they belong to a field as a group they more easily accept values and goals related to the field (Ryan & Stiller, 1991).

Social bonds connect students to their field (Wehlage et al. 1989). Students are socially bonded when they have reciprocal and emotional ties to others e.g. group mates in a project group. Social bonds are among others formed by commitment and decisions by students about what to do to reach the outcome and meet the goals of the university. Bonding is also stressed if students are involved in academic as well as non-academic activities and finally the students must believe in the education they have chosen and they must feel that the lecturers believe that they are competent to learn and to reach the educational goals formulated in the study regulation.

The main academic activity in the field of the group for each habitus is contributing with capital - social as well as cultural - producing the project report. Having it reviewed by the supervisor, defending it and having it reviewed again. Such academic processes supports the feeling of belonging and integration of the students into academia. (Hawkey 2004)

Students define themselves by the group or fields which they affiliate (Goodenow 1992). Students belong to many fields and may experience the sense of membership or belonging at different levels, fields and subfields. But affiliation to peer groups has a strong influence on the feeling of membership. It might be negative or positive. Peers can motivate each other to work hard or the opposite - taking a more relaxed or strategic attitude (Berndt & Keefe, 1992; Brown, 1993).

Membership of fields which care stresses the membership and feeling of belonging. When students' needs for belonging, social connectedness, autonomy and self-direction are met they feel more comfortable (Battistich, Solomon, Kim, Watson, Schaps & Delucci, 1995; Solomon, Watson, Battistich, Schaps & Delucchi, 1992). Caring groups have implicit or explicit sets of values and tend to follow these. Mutual concern and care about the welfare of others are in such values. It includes giving support to each other. A group's structure with autonomy, responsibility and ownership to cultural capital and with professor support is essential (Connell & Wellborn, 1991; Skinne, Zimmer-Gembeck & Connell, 1998; deCharms 1976, 1984)

Conditions for autonomy arises among others when there is room for student initiative to accumulate more cultural capital and the professor e.g. communicates choices and academic rules and social behaviour including the use of arguments and respect for evidence and research findings. But the field of the group is not – when it comes to building new capital and learning - a laissez-faire area or democratic room (Connell & Wellborn, 1991; Noblit, 1993; deCharms, 1976).

Structures which support student autonomy and accumulating new capital are not created by itself. It might be created by the institution, the professors and the students. Formally or informally. Formally e.g. by providing rooms for the students – free of interference – and courses which support creating student autonomy and providing professors ready to give room for student autonomy.

Habitus of each group member and structures between them affect how students interact, socialise and influence each others engagement in building capital for learning. It affects their feeling of membership and belonging. The structure can be cooperative or competitive. It can be individual or social. Cooperative learning structures are characterised by a common understanding of each student's efforts to accomplish the common goals and contribute to the learning of the other students in the group (Johnson, Maryama, Johnson, Nelson & Skon, 1981). Students obtain personal goals by helping their team members to reach the learning objectives and increase the capital of the group. Cooperative learning has found to be beneficial for groups in their achieving goals (Slavin, 1995) and it has been found (Berndt and Keefe, 1992) that cooperative learning helps creating an environment that helps students accumulate social capital - form friendships, act in helpful ways and provide time and opportunity to socialise and care for each other.

#### 4. CONCLUSION

A theoretical understanding of why a relatively poor physical and academic environment are accepted and not influences the assessment of the project group environment negative in a PBL model as The Aalborg Model practiced e.g. at the ESM Basic Year can be reached with the help of Bourdieus concepts and the psychological nature of membership and belonging.

The group is a subfield and the group room is the visual and physical materialisation of the subfield. In the group each member confronts their habitus with each other and creates rules and norms valid for the members in the field. Because of the relative autonomy for the group to create and form its own field group members establish a social world of their own. A world related to the materialisation of the field – the group room. A world relatively free from interference of which each group members feel belonging to and worth supporting.

Games and fighting within the field is not unusual but can be controlled by rules set up by the members themselves and with input from the project management course. The group as a field and the group room as its material field are filled with space and relative freedom only restricted by the academic structures – mainly demands, goals or objectives - in the study regulation and from the facilitator in the form of supervision and academic advices.

The group room are the physical field for accumulation of social and cultural capital. This process is individual as well as common and involves sharing of capital. Participating in the common accumulations process creates a feeling of belonging besides the 'competition' between group members for own values and ideas. In most groups this feeling grows stronger and stronger during the lifetime of the group and creates a positive attitude towards the learning environment. The learning environment is synonym with the project group environment.

Students in the Aalborg Model are not satisfied with the study and learning environment because they are integrated into the institution, the faculty or study program but because are afforded a group room where they - in relative autonomy - are free to share and accumulate cultural as well as social capital.

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